English

DMX OPERATOR

DC-1216

USER'S MANUAL

Please read before use

DMX OPERATOR
DC-1216

Improvement and changes to specifications, design and this manual, may be may at any time without prior notice.

All rights reserved.

Contents

Features 1

General Instructions 2

1. Overview 3

1.1 Front View 3
1.2 Rear View 6

2. Operation Guide 7

2.1 Program Enable 7

2.2 Programming Scenes 8

2.2.1 Scene Editing 11
2.2.2 Scanner Copy 12
2.2.3 Scene Copy 13
2.2.4 Delete a Scene 15
2.2.5 Delete all Scenes 15
2.2.6 Bank Copy 16

2.3 Programming Chases 17

2.3.1 Program a bank of scenes into a Chase 18
2.3.2 Add a Step 18
2.3.3 Delete a Step 20
2.3.4 Delete a Chase 21
2.3.5 Delete all Chases 21

2.4 Running Scenes 22

2.4.1 Manual Mode 22
2.4.2 Auto Mode 22
2.4.3 Music Mode 24

2.5 Running Chases 25

2.5.1 Manual Mode 25
2.5.2 Auto Mode 25
2.5.3 Music Mode 26

2.6 MIDI Operation 27

2.6.1 MIDI Channel Setting 27
2.6.2 Implementation 28

Technical Specifications 29

Features

Thank you for your purchase of this BOTEX product.
This DMX Operator features include:

- 192 DMX channels, 12 scanners of 16 DMX channels
- 30 banks of 8 programmable scenes
- 6 chases of 240 programmed scenes from 30 banks
- 8 faders for manual control
- Chasing speed and Fade Time of Auto programs(scenes and chases) under control
- Fade Time control over all DMX channel
- Blackout master
- Manual override
- Built-in microphone for Music triggering
- MIDI control over banks, chases and Blackout
- Power failure memory

NOTE:
A knowledge of MIDI and DMX is required to fully utilize this unit.

General Instructions

Read the instruction in this manual carefully and thoroughly, as they give important information regarding safety during use and maintenance. Keep this manual with the unit, in order to consult it in the future. If the unit is sold or given to another operator, make certain that it always has its manual, to enable the new owner to read about its operation and relative instructions.

⚠ Warnings

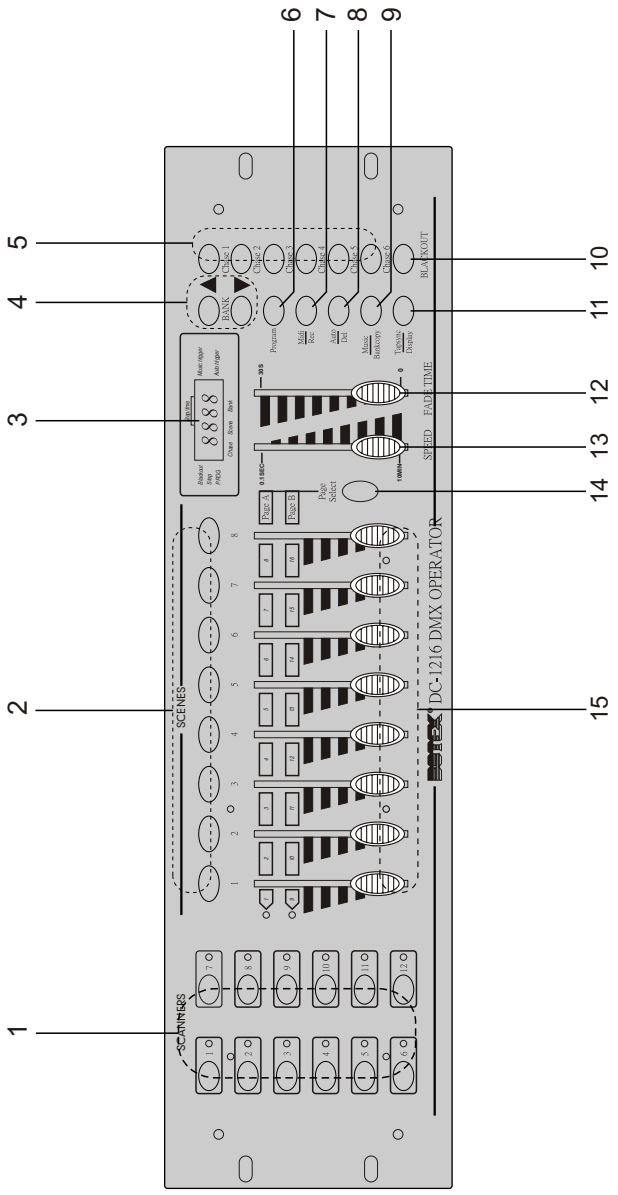
- **DO NOT** make any inflammable liquids, water or metal objects enter the unit.
- Should any liquid be spilled on the unit, **DISCONNECT** the power supply to the unit immediately.
- **STOP** using the unit immediately In the event of serious operation problems and either contact your local dealer for a check or contact us directly.
- **DO NOT** open the unit--there are no user serviceable parts inside.
- **NEVER** try to repair the unit yourself. Repairs by unqualified people could cause damage or faulty operation. Contact your nearest dealer.

⚠ Cautions

- This unit is **NOT** intended for home use.
- After having removed the packaging check that the unit is **NOT** damaged in any way. If in doubt, **DON'T** use it and contact an authorized dealer.
- Packaging material (plastic bags, polystyrene foam, nails, etc.) **MUST NOT** be left within children's reach, as it can be dangerous.
- This unit must only be operated by adults. **DO NOT** allow children to tamper or play with it.
- **NEVER** use the unit under the following conditions:
  In places subject to excessive humidity.
  In places subject to vibrations or bumps.
  In places with a temperature of over 45°C/113°F or less than 2°C/35.6°F.
  Protect the unit from excessive dryness or humidity (ideal conditions are between 35% and 80%).
- **DO NOT** dismantle or modify the unit.

1. Overview

1.1 Front View



1. Overview

1.1 Front View

1. Scanner Buttons(1-12)

12 scanners of 16 DMX channels & fader control

Scanners	DMX channels	Fader control	LED
1	1-16	Off	Off
2	17-32	Off	Off
3	33-48	Off	Off
4	49-64	Off	Off
5	65-80	Off	Off
6	81-96	Off	Off
7	97-112	Off	Off
8	113-128	Off	Off
9	129-144	Off	Off
10	145-160	Off	Off
11	161-176	Off	Off
12	177-192	Off	Off

Scanners	DMX channels	Fader control	LED
1	1-16	On	On
2	17-32	On	On
3	33-48	On	On
4	49-64	On	On
5	65-80	On	On
6	81-96	On	On
7	97-112	On	On
8	113-128	On	On
9	129-144	On	On
10	145-160	On	On
11	161-176	On	On
12	177-192	On	On

Press a scanner button to turn on manual fader control. Press the scanner button again to turn off fader control. The LED besides the button lights or goes out to indicate this selection.

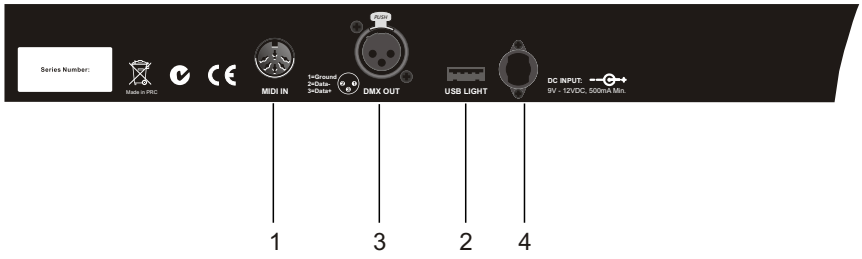
1. Overview

1.1 Front View

2. Scene Buttons	Press the scene buttons to load or stored your scenes. There are a maximum of 240 programmable scenes.
3. Segment Display	Shows the current activity or programming state.
4. Bank Buttons(Up/Down)	Press the Up/Down buttons to select a bank from 30 banks.
5. Chase Buttons(1-6)	Used to select your programmed chase consisting a maximum of 240 scenes
6. Program Button	Used to activate Program mode.
7. MIDI/Rec Button	Used to control MIDI operation or to record programs.
8. Auto/Del Button	Used to activate Auto mode or to delete scenes and chases.
9. Music/Bank Copy	Used to activate Music mode or to create scenes and chase programs.
10. Blackout Button	Used to disable channel output.
11. Tap Sync/Display	Used to create a standard beat or to change the values display between % and 255.
12. Fade Time Slider	Used to adjust the Fade Time. Fade Time is the amount of time it takes for a fixture(scanner) to move from one position to another, for the dimmer to fade in or fade out.
13. Speed Slider	Used to adjust the speed at which the scenes will chase.
14. Page Select Button	Used to select faders for the fixture between Page A(1-8) and Page B (9-16).
15. Faders	This faders are used to control the intensity of channel 1-8 or channel 9-16 depending upon the selected page.

1. Overview

1.2 Rear View



1. MIDI IN	Receives MIDI data.
2. USB Connector	Used to for DJ work light with electric rating 5V/30mA
3. DMX Out	This connector sends your DMX value to the DMX fixture or DMX pack.
4. DC Input	DC 9-12V, 500mA min.

2. Operation Guide

GENERAL

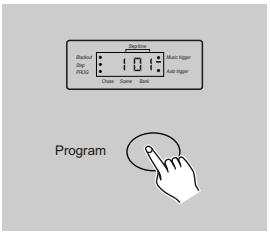
This unit allows you to program 12 scanners of 16 DMX channels, 30 banks of 8 programmable scenes, 6 chases of 240 programmed scenes using 8 faders and other function buttons. Up to 8 scenes can be programmed into a bank, and the amount of 240 programmed scenes can be stored into a chase and the scenes can be triggered by Music, Auto, Tap Sync, MIDI and Manual.

Display Information

The Segment Display consists of 4 digits. The first digit shows the active chase number(1-6), the second digit shows the active scene number(1-8), and the third and forth digits show the active bank number(01-30).

During Auto mode, a highlight in the lower right corner of the Segment Display next to " Auto trigger" indicates its selection.
During Music mode, a highlight in the upper right corner of the Segment Display next to " Music trigger" indicates its selection.
During Blackout mode, a fast blinking light indicates its selection in the upper left corner of the Segment Display next to " Blackout".
During Program mode, a fast blinking light indicates its selection in the lower left corner of the Segment Display next to " PROG.".

2.1 Program Enable



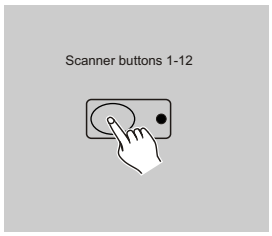
When the power is turned on, this unit enters Manual mode automatically.

Press the Program button for three seconds to activate Program mode, a fast blinking light in the Segment Display next to "PROG." indicates its selection.

2. Operation Guide

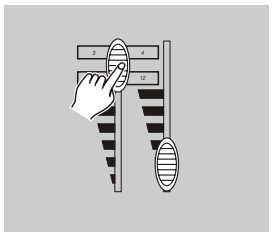
2.2 Programming Scenes

1. Enter Program mode.



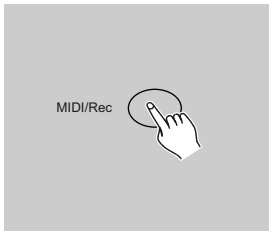
2. Press the Scanner button to turn on its fader control, which is indicated by the lit LED.

   You may select several scanners at a time by tapping of these Scanner buttons, so you can assign several fixtures at a time with this unit.



3. Create a desired scene using the faders. The DMX value is 0 when the fader is fully down(bottom) and 255 when it is fully up(top).

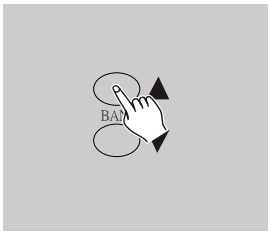
4. If necessary , you may tap the Page Select button to control the second set of 8 DMX channels.



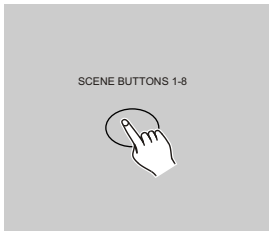
5. Once the scene is satisfactory, tap the MIDI/Rec button to program this scene into memory.

2. Operation Guide

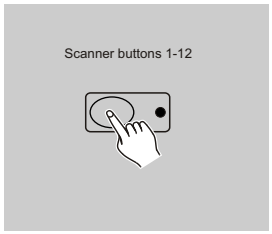
2.2 Programming Scenes



6. Tap the Bank Up/Down button to select the bank you want to store your scene into. There are total 30 banks you can select, you may store up to 8 scenes into each bank.



7. Tap the Scene button to store your scene, all LEDs and the Segment Display will flash three times briefly indicating this operation, then the Segment Display will show the bank and the scene.

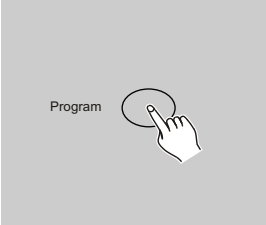


8. Repeat steps 3-7until all desired scenes have been programmed into memory. Tap the Scanner button again to turn off its fader control.

   To assign another scanner(fixture), you may tap the corresponding Scanner button to turn on its fader control, then you may begin your programming again.

2. Operation Guide

2.2 Programming Scenes



9. If you wish not continue your programming, press and hold down the Program button for three seconds to exit Program mode, the blinking light in the Segment Display goes out indicating this selection.

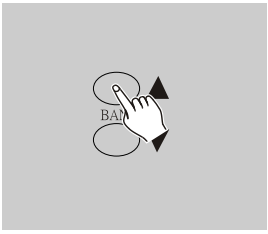
EXAMPLE: Program 8 scenes with channel 1-8 at full in sequence into bank 2 and assign these scenes to scanner 2.

1. Program enable.
2. Tap the Scanner 2 button to turn on its fader control.
3. Tap the Page Select button to select Page A.
4. Push Fader 1 to the top position.
5. Tap the MIDI/Rec button.
6. Select bank 2 using Bank Up/Down button.
7. Tap the Scene 1 button to store the first scene.
8. Repeat steps 4-7 until all 8 scenes have been programmed into bank 2.
9. Tap the Scanner 2 button again to turn off its fader control.
10. Press the Program button for 3 seconds to exit Programming mode.

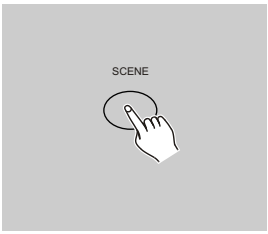
2. Operation Guide

2.2.1 Scene Editing

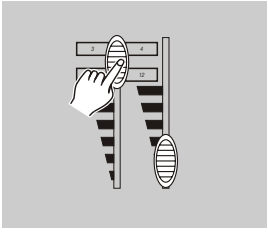
1. Program enable.



2. Tap the Bank Up/Down button to select the bank that contains the scene you wish to edit.



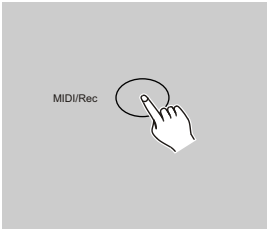
3. Select the scene you want to edit by tapping its Scene button.



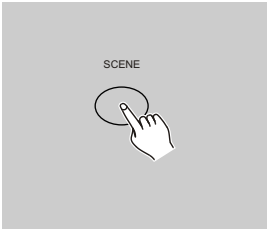
4. Use the Faders to make your desired adjustments.

2. Operation Guide

2.2.1 Scene Editing



5. Once you've made your changes, tap the MIDI/Rec button.

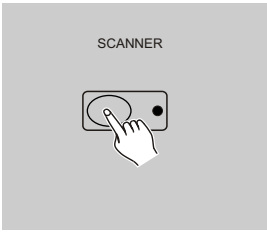


6. Tap the Scene button that corresponds to the scene you're editing. This will overwrite the exited scene.

NOTE:

Be sure to select the same scene in steps 3 and 6, otherwise you may accidentally record over an exited scene.

2.2.2 Scanner Copy

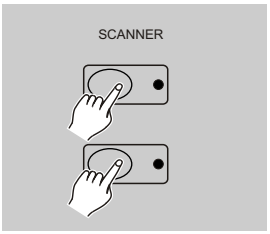


This function allows you to copy the settings of one scanner to another.

1. Press and hold down the Scanner button you want to copy.

2. Operation Guide

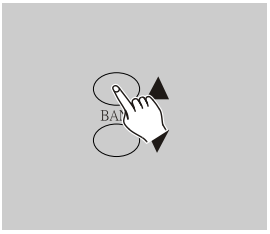
2.2.2 Scanner Copy



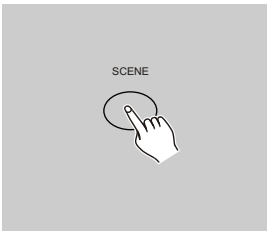
2. While holding the Scanner button, tap the Scanner button you want to copy to.

2.2.3 Scene Copy

1. Program enable.



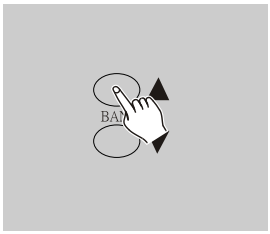
2. Tap the Bank Up/Down button to select the bank that contains the scene you wish to copy.



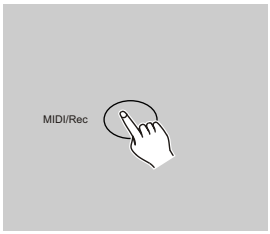
3. Select the scene you want to copy by tapping its Scene button.

2. Operation Guide

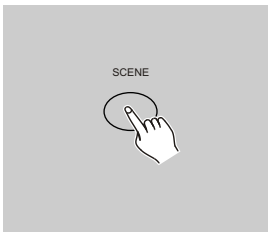
2.2.3 Scene Copy



4. Tap the Bank Up/Down button to select the bank you wish to copy the scene to.



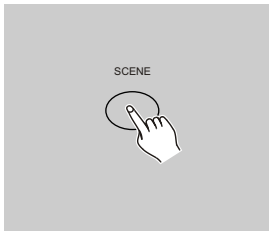
5. Tap the MIDI/Rec button.



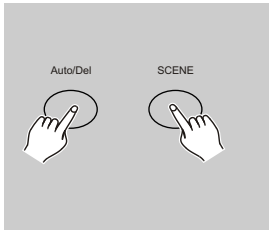
6. Tap the Scene button you wish to copy the scene to.

2. Operation Guide

2.2.4 Delete a Scene



1. Tap the desired Scene button to select the scene you wish to delete.

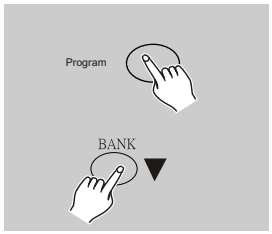


2. Press and hold down the Auto/Del button. While holding down the Auto/Del button, tap the Scene button that stores the scene you wish to delete.

When a programmed scene is deleted, all DMX channel in this scene is set to 0.

2.2.5 Delete all Scenes

This function will reset all DMX channel to 0 output.



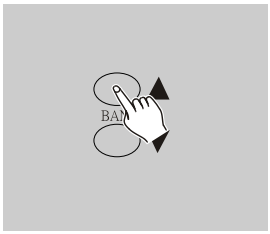
1. With the power off, press and hold down the Program and Bank Down buttons at a time.

2. Apply power again, all scenes should be cleared.

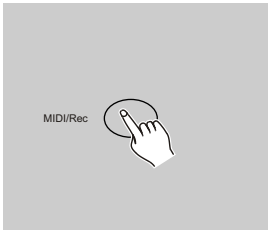
2. Operation Guide

2.2.6 Bank Copy

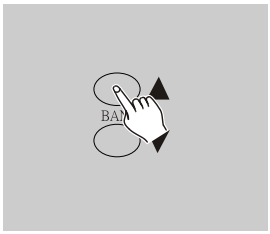
1. Program enable.



2. Tap the Bank Up/Down button to select the bank you wish to copy.



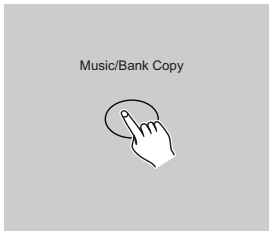
3. Tap the MIDI/Rec button.



4. Tap the Bank Up/Down button to select the bank you wish to copy to.

2. Operation Guide

2.2.6 Bank Copy

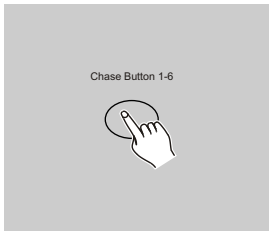


5. Tap the Music/Bank Copy button, all LEDs and the Segment Display will flash three times briefly indicating the function has been completed.

6. Press the Program button for three seconds to exit Programming mode.

2.3 Programming Chase

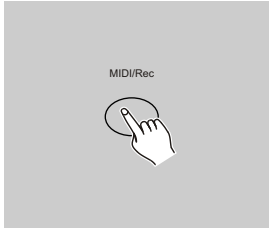
You must program scenes before you can program chases, this function allows you to store up to 240 scenes into one chase.



1. Program enable.

2. Tap the Chase button to select the chase to program. Each time you can select a chase only.

3. Select a desired scene from the bank that has stored scenes.(described in Programming Scenes)

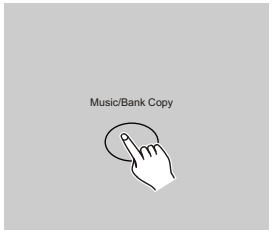


4. Tap the MIDI/Rec button.

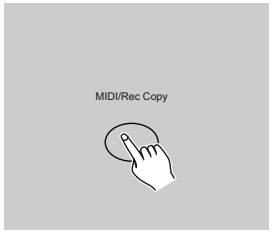
5. Repeat steps 3-4 until you've reached your desired effect.
You may record up to 240 scenes into a chase.

2. Operation Guide

2.3.1 Program a bank of scenes into a Chase

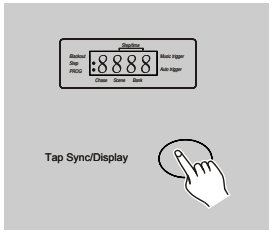


1. Program enable.
2. Select the chase using Chase buttons 1-6.
3. Use Bank Up/Down button to select the bank that contains the scenes you wish to copy.
4. Tap the Music/Bank Copy button.



5. Tap the MIDI/Rec Copy button, all LEDs and the Segment Display will flash three times briefly indicating all 8 scenes in this bank have been programmed into this chase.

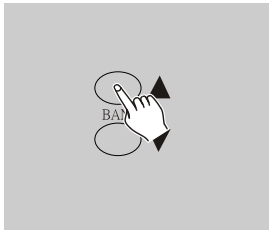
2.3.2 Add a Step



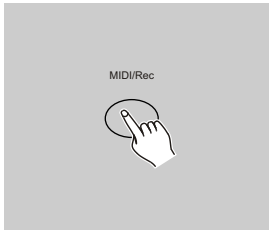
1. Program enable.
2. Select the chase you wish to add a step to.
3. Tap the Tap Sync/Display button causing a highlight next to "Step" , the first digit in the Segment Display shows the chase and the next three digits show its step.

2. Operation Guide

2.3.2 Add a Step

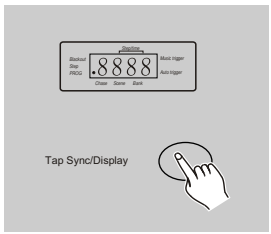


4. Tap the Bank Up/Down button to scroll to the step you wish to add a step after.



5. Tap the MIDI/Rec button, the Segment Display will read the step one higher than before.

   For example, if you want to insert a step between step 3 and step 4, and you scroll to step 3, when you tap the MIDI/Rec button, the Segment Display will read step 4.



6. Tap the Tap Sync/Display button again, the Segment Display shows the current chase, scene and bank.
   Create a desired scene and record it as a new step or select a programmed scene you wish to add into this chase.

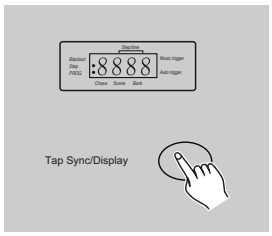
Hints: You may tap the Tap Sync/Display button to change the display mode between step and the bank.

2. Operation Guide

2.3.2 Add a Step

7. Tap the MIDI/Rec button again , all LEDs and the Segment Display will flash three times briefly indicating the new step has been inserted into this chase.

2.3.3 Delete a Step

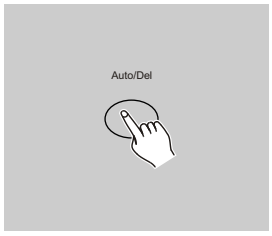


1. Program enable.

2. Select the chase that contains the step you wish to delete.

3. Tap the Tap Sync/Display button causing the Segment Display shows the steps.

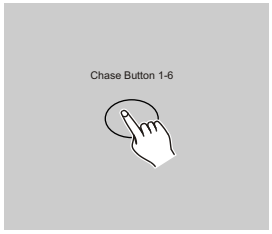
4. Tap the Bank Up/Down button to scroll to the step you wish to delete.



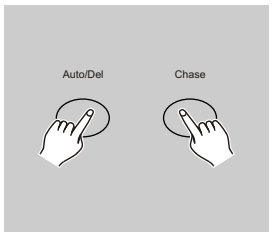
5. Tap the Auto/Del button to delete the step, all LEDs and the Segment Display will flash three times briefly indicating that the step has been deleted.

2. Operation Guide

2.3.4 Delete a Chase

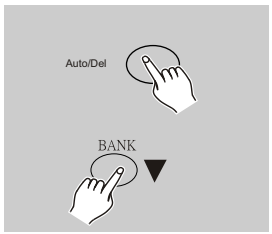


1. Select the chase you wish to delete.



2. Press and hold down the Auto/Del button. Tap the Chase button while holding down the Auto/Del button, all LEDs and the Segment Display will flash three times briefly indicating this chase has been deleted.

2.3.5 Delete all Chases



1. With the power off, press and hold down the Auto/Del and Bank Down buttons at the same time.

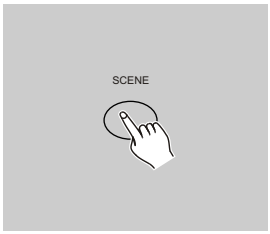
2. Apply the power again.

2. Operation Guide

2.4 Running Scenes

2.4.1 Manual Mode

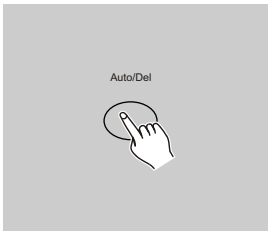
1. When the power is turned on, this unit enters Manual mode automatically.
2. Make sure Auto trigger and Music trigger indicators in the Segment Display are both off.
3. Use the Bank Up/Down button to select the bank that contains the scenes you wish to run.



4. Tap the Scene button to select the scene to run.

2.4.2 Auto Mode

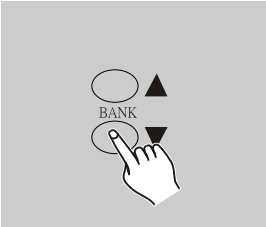
This function allows you to run a bank of programmed scenes in a sequential loop.



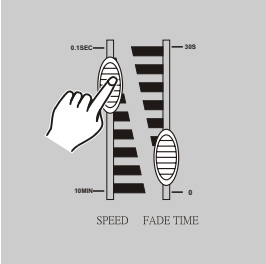
1. Tap the Auto/Del button to activate Auto mode. A highlight next to "Auto trigger" will indicate Auto mode.

2. Operation Guide

2.4.2 Auto Mode



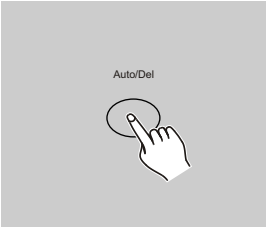
2. Use the Bank Up/Down button to select a bank of scenes to run.



3. After selecting the bank of scenes you wish to run, you can use the Speed slider(or Tap Sync/ Display button) and Fade Time slider to adjust the scenes to your desired effect.

Hints:

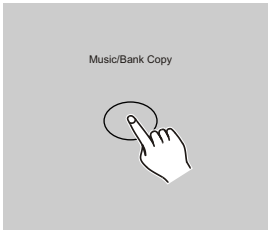
The Tap Sync button is used to set the speed by tapping the button several times, the last two taps will define the speed with a maximum of 10 minutes. Tap Sync will override any previous setting of the Speed slider unless the slider is moved again.



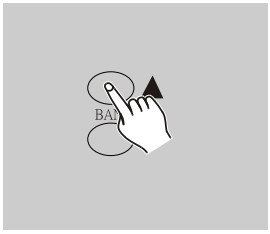
4. Tap the Auto/Del button again to exit Auto mode.

2. Operation Guide

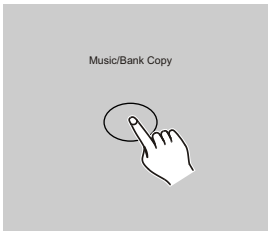
2.4.3 Music Mode



1. Tap the Music/Bank Copy button to activate Music mode. A highlight next to "Music trigger" indicates Music mode.



2. Use the Bank Up/Down button to select the bank that holds the scenes you wish to run. The scenes you've selected will chase in a sequential order according to the music rhythms detected by the built-in microphone.



3. Tap the Music/Bank Copy button again to exit Music mode.

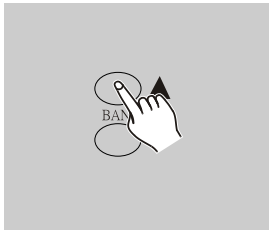
2. Operation Guide

2.5 Running Chases

You must program scenes before you can run chases.

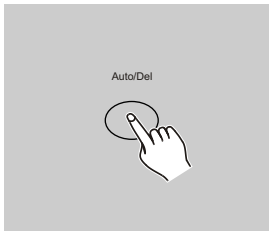
2.5.1 Manual Mode

1. When the power is turned on, this unit enters Manual mode automatically.
2. Select your desired chase by tapping one of the six Chase buttons. A second tap of this button will deactivate this function.
3. Use the Speed slider(or Tap Sync button) and Fade Time slider to adjust the current scenes to your desired effects.



4. Use the Bank Up/Down button to scroll through the chase to run all banks of scenes.

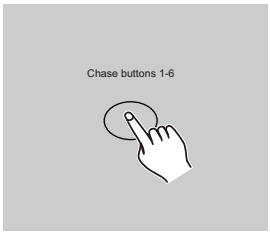
2.5.2 Auto Mode



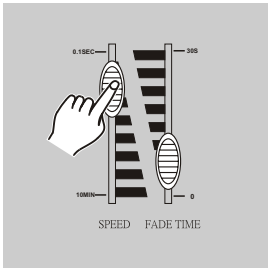
1. Tap the Auto/Del button to activate Auto mode. A highlight next to "Auto trigger" will indicate Auto mode.

2. Operation Guide

2.5.2 Auto Mode



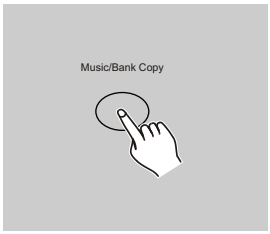
2. Select your desired chase by tapping one of the six Chase buttons. A second tap of this button will deactivate this function.



3. Use the Speed slider(or Tap Sync) and Fade Time slider to adjust the chase to your desired effects.

   You may select several chases at a time, the chases will run in sequence that you select the chases.

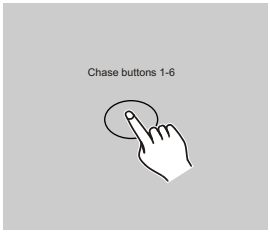
2.5.3 Music Mode



1. Tap the Music/Bank Copy button to activate Music mode. A highlight in the Segment Display next to "Music trigger" will indicate Music mode.

2. Operation Guide

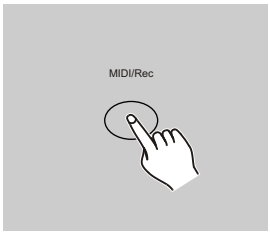
2.5.3 Music Mode



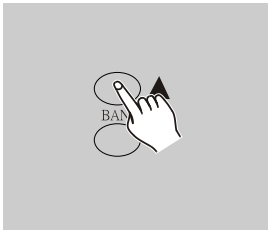
2. Select your desired chase by tapping one of the six Chase buttons, the chase will be triggered by the music rhythms.
   You may select several chases at a time.

2.6 MIDI Operation

2.6.1 MIDI Channel Setting



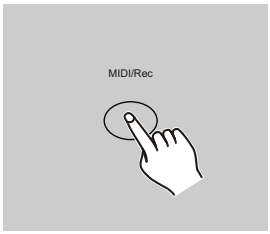
1. Press and hold down the MIDI/Rec button for three seconds, the last two digits of the Segment Display will flash to indicate MIDI channel setting is ready.



2. Use the Bank Up/Down button to select the DMX channel 01-16 to assign to MIDI channel.

2. Operation Guide

2.6.1 MIDI Channel Setting



3. Press and hold down the MIDI/Rec button for three seconds to store your setting and to deactivate MIDI setting.
   If you wish to give up your setting, tap any other button(except Bank Up/Down buttons) to exit MIDI mode.

2.6.2 Implementation

This unit receives Note On signals, which enables to run 15 banks(01-15) of scenes and 6 chases of scenes. In addition, blackout function can be activated by MIDI signal.

BANK	NOTE NUMBER	FUNCTION
Bank 1	00 to 07	Turn on or off Scenes 1-8 of Bank 1
Bank 2	08 to 15	Turn on or off Scenes 1-8 of Bank 2
Bank 3	16 to 23	Turn on or off Scenes 1-8 of Bank 3
…	…	……
Bank 14	104 to 111	Turn on or off Scenes 1-8 of Bank 14
Bank 15	112 to 119	Turn on or off Scenes 1-8 of Bank 15
Chase 1	120	Turn on or off Chase 1
Chase 2	121	Turn on or off Chase 2
Chase 3	122	Turn on or off Chase 3
Chase 4	123	Turn on or off Chase 4
Chase 5	124	Turn on or off Chase 5
Chase 6	125	Turn on or off Chase 6
	126	Blackout

Technical Specifications

Power Input ..... DC 9~12V, 500 mA min.
DMX Output ..... 3 pin female XLR
MIDI Signal ..... 5 pin standard interface
Audio Input ..... By built-in microphone
Dimensions 482x132x73mm
Weight(appro.) ..... 2.5 kg

24-004-0505

Rev 2.2

E-mail: info@botex.com

Web Site: www.botex.com